REMARKS

Claims 1-10 remain pending in the above-identified application and stand ready for further action on the merits.

Claim Rejections under 35 USC § 103(a)

Claims 1-3, 5 and 7-10 are rejected under the provisions of 35 USC § 103(a) as being rendered obvious over Isozaki US '369 (US 6,337,369) in view of Starzewski US '092 (US 5,670,092).

Claim 4 has been rejected under the provisions of 35 USC § 103(a) as being rendered obvious over Isozaki US '369 in view of Starzewski US '092, further in view of DesMarais et al. US '244 (US 6,362,244).

Claim 6 has been rejected under the provisions of 35 USC § 103(a) as being rendered obvious over Isozaki US '369 in view of Starzewski US '092, further in view of Dempo US '178 (US 5.512,178).

Reconsideration and withdrawal of each of the above rejections is respectfully requested based on the following considerations.

Legal Standard for Determining Prima Facie Obviousness

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally,

Application No. 10/538,079
Amendment dated June 19, 2008
Reply to Office Action of March 19, 2008

the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

"There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998) (The combination of the references taught every element of the claimed invention, however without a motivation to combine, a rejection based on a *prima facie* case of obvious was held improper.).

"In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification." *In re Linter*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in

the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Lee, 277 F.3d 1338, 1342-44, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002) (discussing the importance of relying on objective evidence and making specific factual findings with respect to the motivation to combine references); In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The Supreme Court of the United States has recently held that the teaching, suggestion, motivation test is a valid test for obviousness, but one which cannot be too rigidly applied. See KSR Int'l Co. v Teleflex Inc., 127 SCt 1727, 82 USPQ2d 1385 (U.S. 2007). The Supreme Court in KSR Int'l Co. v. Teleflex, Inc., ibid., reaffirmed the Graham factors in the determination of obviousness under 35 U.S.C. § 103(a). The four factual inquiries under Graham are:

- (a) determining the scope and contents of the prior art;
- (b) ascertaining the differences between the prior art and the claims in issue;
- (c) resolving the level of ordinary skill in the pertinent art; and
- (d) evaluating evidence of secondary consideration.

Graham v. John Deere, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (U.S. 1966).

The Court in KSR Int'l Co. v. Teleflex, Inc., supra., did not totally reject the use of "teaching, suggestion, or motivation" as a factor in the obviousness analysis. Rather, the Court recognized that a showing of "teaching, suggestion, or motivation" to combine the prior art to meet the claimed subject matter could provide a helpful insight in determining whether the claimed subject matter is obvious under 35 U.S.C. § 103(a).

Even so, the Court in KSR Int'l Co. v. Teleflex, Inc., ibid., rejected a rigid application of the "teaching, suggestion, or motivation" (TSM) test, which required a showing of some

Reply to Office Action of March 19, 2008

teaching, suggestion, or motivation in the prior art that would lead one of ordinary skill in the art to combine the prior art elements in the manner claimed in the application or patent before holding the claimed subject matter to be obvious.

Accordingly, while the courts have adopted a more flexible teaching, suggestion, motivation (TSM) test in connection with the obviousness standard based on the KSR v. Teleflex case, which case involved a mechanical device in a relatively predictable technological area, it remains true that, despite this altered standard, the courts recognize inventors face additional barriers in relatively unpredictable technological areas as noted in Takeda Chemical Industries, Ltd. v. Alphapharm Pty., Ltd., 83 USPQ2d 1169 (Fed. Cir. 2007).

Further, the Examiner bears the initial burden of presenting a prima facie case of obviousness. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." In re Kahn, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336, quoted with approval in KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007).

The Present Invention and Its Advantages

The method for producing a polarizing film according to the present invention is characterized in that contact between an aqueous solution containing boric acid and oxygen is suppressed, whereby an iodine type polarizing film having a high contrast is produced.

Distinctions Over the Cited Art

Isozaki US '369 (US 6,337,369 B1) discloses a polarizing film comprising polyvinyl alcohol having a polyvinylene structure obtained from a polyvinyl alcohol having a degree of polymerization of at least 2600. According to Isozaki US '369, to form the polyvinylene structure, the film of polyvinyl alcohol is subjected to dry-heat stretching at a temperature of at least 100°C in an oxygen-poor atmosphere such as a nitrogen atmosphere or in a vacuum (see column 4, lines 1-12).

Starzewski US '092 (US 5,670,092 A) discloses a polarizing film of improved blocking position based on polyvinyl alcohol containing polyacetylene as the light-polarizing substance, in which the film is treated at a temperature of 100 to 300°C with the exclusion of oxygen to optimize the structure of polyacetylene and then to raise the degree in the wavelength range of 400 to 500 nm (see claim 1 and column 2, lines 1-3).

DesMarais et al. US '244 (US 6,362,244 B1) discloses a method for degasification of high internal phase emulsion components and describes that the deoxygenation of a liquid can be carried out by sparging the liquid with nitrogen gas (see column 5, lines 1-5).

Dempo US '178 (US 5,512,178 A) discloses a water treatment method and an apparatus therefore and describes the filtering of water through activated carbon.

Accordingly, it is submitted that none of the instantly cited prior art references discloses or teaches the suppression of contact between an aqueous solution containing boric acid and oxygen when a polyvinyl alcohol film in/on which iodine is adsorbed and oriented is dipped in the aqueous solution containing boric acid.

Application No. 10/538,079 Amendment dated June 19, 2008

Reply to Office Action of March 19, 2008

Isozaki US '369 and Starzewski US '092 describe the treatment of the PVA film in an

oxygen-poor atmosphere or with the exclusion of oxygen, and DesMarais et al. US '244

describes the deoxygenation of a liquid by sparging the liquid with nitrogen gas. However, these

conditions are <u>not</u> employed when a polyvinyl alcohol film in/on which iodine is adsorbed and

oriented is dipped in the aqueous solution containing boric acid. Rather, the conditions described

by Isozaki US '369 and Starzewski US '092 are employed during the dry-heat treatment or heat-

treatment of the PVA film.

Accordingly, it is submitted that the present invention would <u>not</u> have been rendered

obvious from any combination of the instantly cited prior art documents. In this regard, no

reason, rationale or motivation is found in the cited art, or otherwise provided by the USPTO in

the outstanding office action, that would allow one of ordinary skill in the art to arrive at the

instant invention as claimed. Any contentions of the USPTO to the contrary must be

reconsidered at present.

CONCLUSION

Based upon the remarks presented herein, the Examiner is respectfully requested to issue

a Notice of Allowance clearly indicating that each of pending claims 1-10 are allowed and

patentable under the provisions of Title 35 of the United States Code.

Should there be any outstanding matters that need to be resolved in the present

application, the Examiner is respectfully requested to contact John W. Bailey (Reg. No. 32,881)

at the telephone number below, to conduct an interview in an effort to expedite prosecution in

connection with the present application.

Docket No.: 0020-5381PUS1

Application No. 10/538,079 Amendment dated June 19, 2008 Reply to Office Action of March 19, 2008

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.147; particularly, extension of time fees.

Dated: June 19, 2008

Respectfully submitted,

John W. Bailey

Registration No.: 32,881

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant